Docket No. AGSFC.0107 Patent

In the Specification:

On page 6, please delete the paragraph beginning at line 3 through line 13 and replace with the following section:

Figures 1A and 1B show side and front views of a semi-submersible drilling rig on which the disclosed invention can be utilized, although these views are greatly simplified for ease of understanding. With reference first to Figure 1A, the semi-submersible rig 100 has flotation elements 110, which provide buoyancy, and a working area 112, joined together by stability columns 114. The working area 112 is divided into different decks, but only two [[off]] of these are of importance in this discussion and are shown. These are the drilling deck 120 and the main deck 122. In this view, the drilling derrick 124 rises from the drilling deck 120. Seen hanging [[from]] adjacent to the primary load path 130 below the main deck 122 are riser sections 132. Riser sections 132 can be stored horizontally in pipe racks or vertically; when stored vertically, as seen here the riser sections 132 extend vertically through the working area, with their lower portions seen below the decks.

On page 6, please delete the paragraph beginning at line 14 through page 7, line 3 and replace with the following section:

Figure 1B shows a view of the semi submersible from the front of the rig. Large cranes 126 and 128 occupy sections of the [[main]] drilling deck 120. Drilling derrick 124 is seen to have two hoist assemblies 140 for handling the various tubular structures (drill pipe, casing, risers, etc.) which are used in drilling and preparing a well for production. One hoist assembly, 140A, is designated the primary assembly, while the other, 140B, is the secondary assembly. Each of these hoist assemblies is associated with a system for rotating the drill pipe, either a top drive or a rotary table (not specifically shown). Having two hoists and two rotary assemblies allows a string of tubulars to be put together by the secondary hoist assembly 140B at the same time the primary hoist assembly 140A is handling other steps in the drilling process. This type of work sharing is further explained in U.S. Patent 6,047,781, which is hereby incorporated by reference. The primary and secondary hoist assemblies are located some distance apart, e.g. 30 feet, so that work on one does not interfere with work on the other. It is worth noting that at the ocean floor 50, which can currently be as much as a mile and a half below the water surface 60, the end of a work string will be guided into proper position by Remote Operated Vehicles (ROVs). In the water depths contemplated by this invention drill pipe is very flexible and a mile-

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long string of it will easily bridge the 30 or so foot separation between the two rotary assemblies without having to reposition the rig 100. As a result either the primary or secondary rotary assembly can be active in the borehole 52 at any particular moment. Cart [[150]] 350 is seen on the main deck 122 of the rig 100, where it can traverse most of the width of the deck 122 on its rails.

On page 7, please delete the paragraph beginning at line 4 through line 13 and replace with the following section:

Turning now to Figure 2, a simplified layout of the drilling [[floor]] deck 120 is shown. The derrick floor 202 is elevated above the rest of the drilling [[floor]] deck 120. Rotary tables 204 are positioned in the drill floor below the primary and secondary hoisting paths. On the drill floor, drill pipe and the drill bit is made up and run through the water column to the sea bed where it is rotated by either the rotary table or a rotating mechanism (top drive) suspended in the derrick. Later, casing tubulars are assembled in one of the hoisting paths and run into the hole 52. Ramps 210A and 210B feed pipes to the primary and secondary hoisting paths respectively. In this embodiment risers 206 are stored vertically here and extend through the deck to the level below although the riser can also be stored horizontally.

On page 7, please delete the paragraph beginning at line 14 through line 24 and replace with the following section:

Figure 3 shows a schematic of the layout of the main deck 122 level. Central to this level is the moonpool 310, an open area through which the tubulars are extended from the drilling floor to the seabed 50. The cranes [[314]] 126, 128 have their bases on opposite sides of the main deck 122, with booms of sufficient length to reach most areas. Other features seen on this level include portions of crew living quarters 320, mooring assemblies 340, riser storage area 390, pipe storage areas 330, and storage areas 360 for the blow-out protector (BOP) and Xmas tree assemblies. Rails 380 run on either side of the moonpool 310. These rails [[310]] 380 are used to carry the BOP elevator 370, which is used to transport the BOP from its storage position to a position under the primary load path 130 where it can be connected to the marine riser. The rails 380 are also used to carry the innovative support cart 350.

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On page 8, please delete the paragraph beginning at line 1 through line 13 and replace with the following section:

[[The]] As shown in the Figures, the support cart 350 can be used near the end of the development of the well, when it is time for the BOP 160 to be pulled and replaced by a Xmas tree assembly 180. Rather than pulling the BOP 160 completely out of the water or leaving it in relatively close proximity to the Xmas tree assembly 180, the BOP 160, attached to its string of marine riser pipe 162, is pulled out of the hole 52 a short distance (e.g., 50 feet), so that it can clear the seabed 50 as it is moved. Then the entire assembly of marine riser 162, with BOP 160 at the end, is hung on the support cart 350, which receives the entire weight of the string. In the presently preferred embodiment, cart 350 has a static capacity of 700 metric tons. The cart 350 will then be moved to a position at the end 312 of the moonpool, distant d from the Xmas tree assembly 180 that is being installed. This lateral movement reduces the risk of a collision between the BOP 160 and the Xmas tree 180 to an acceptable level. The riser 162 and BOP 160 will remain at this location until the operation requires the BOP 160 to be installed on an adjacent well head or for the BOP 160 to be retrieved to the rig 100.